

A

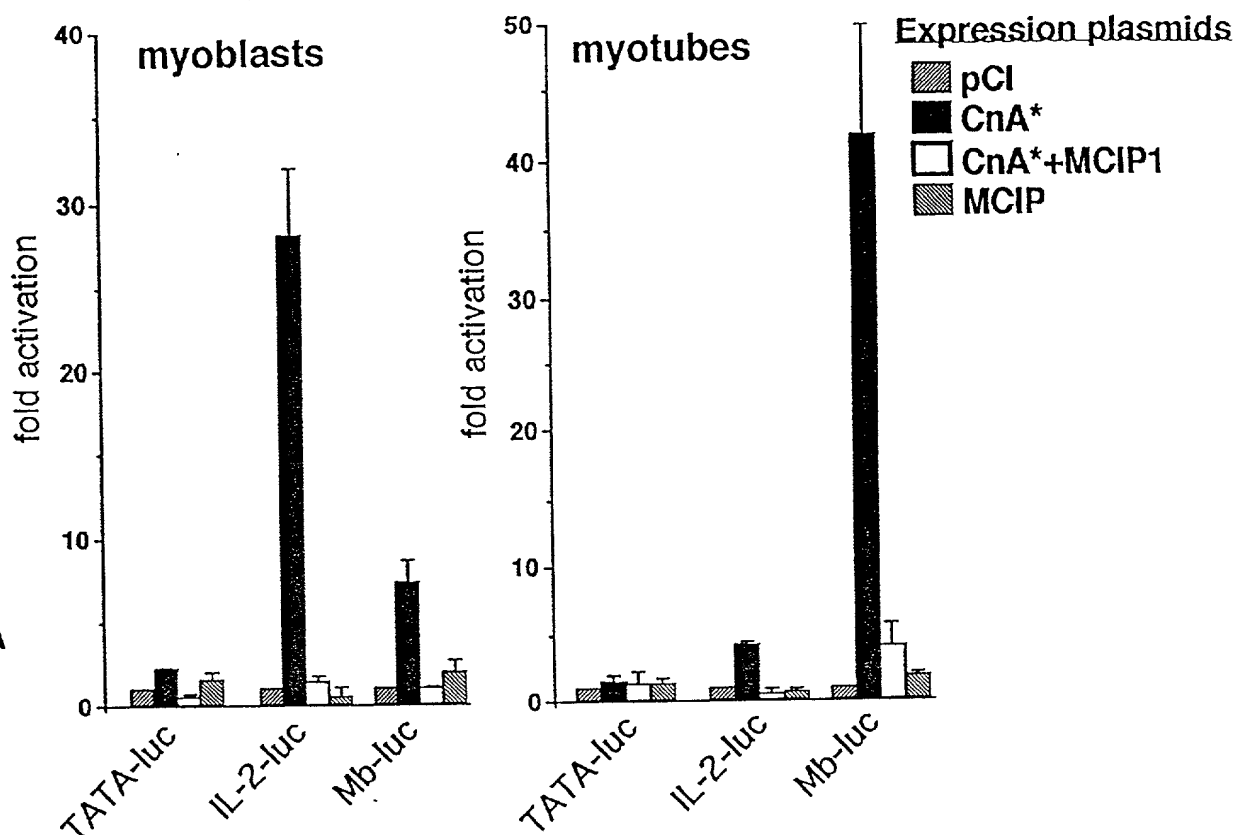


FIG. 1A

B

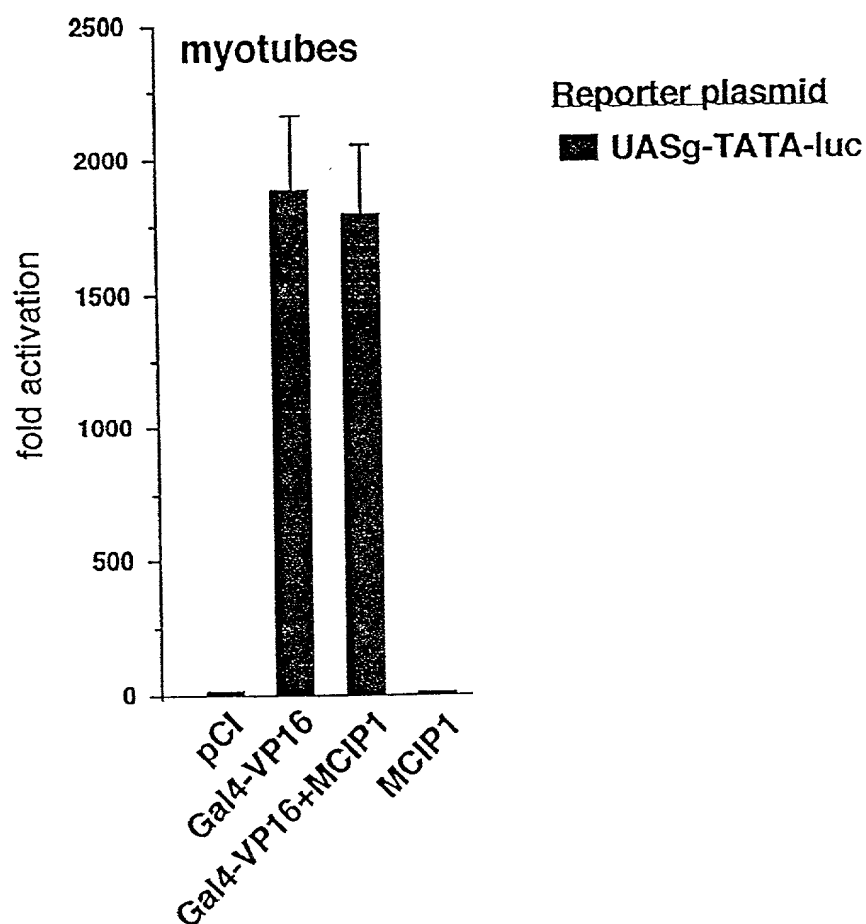


FIG. 1B

0978293-031301

A

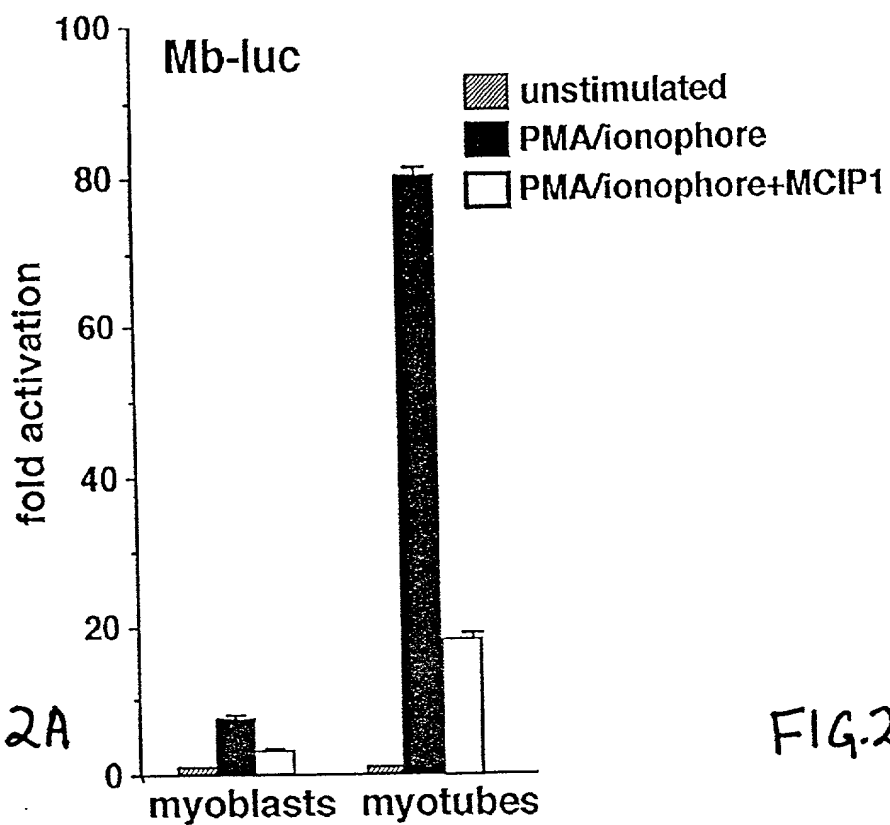


FIG. 2A

B

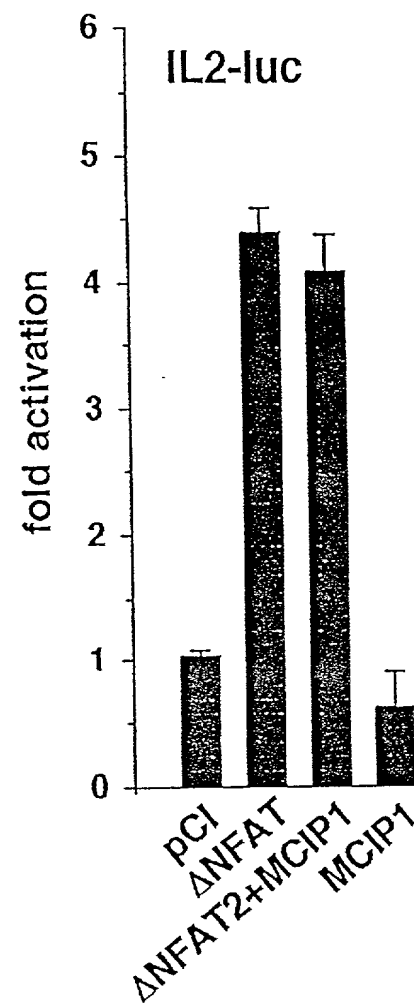


FIG. 2B

C

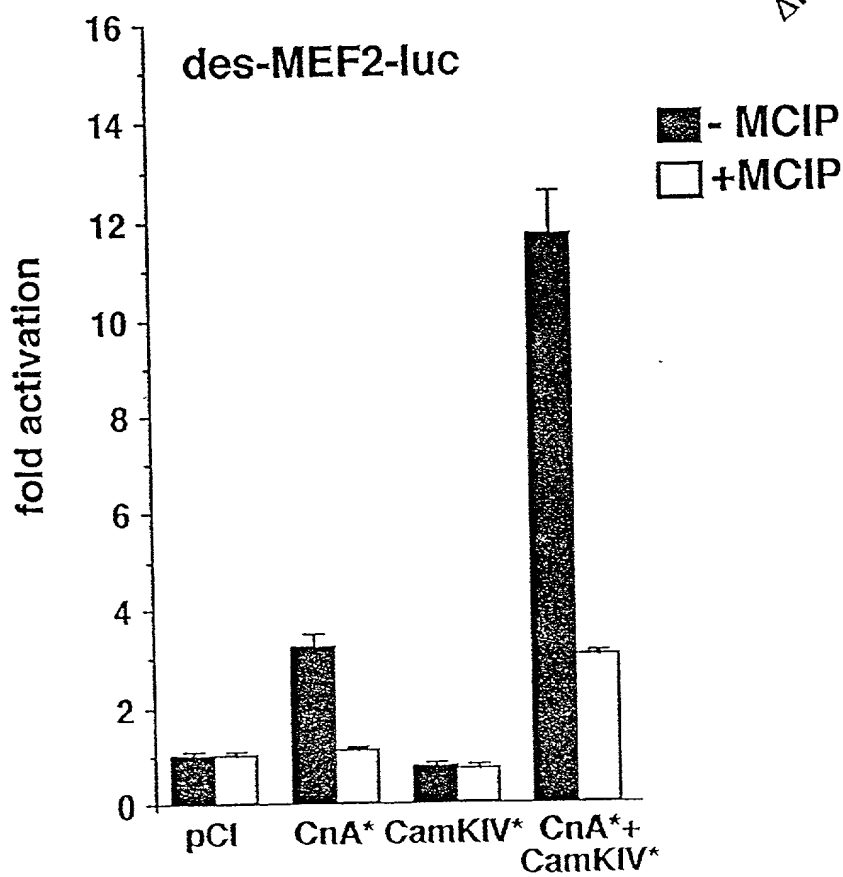


FIG. 2C

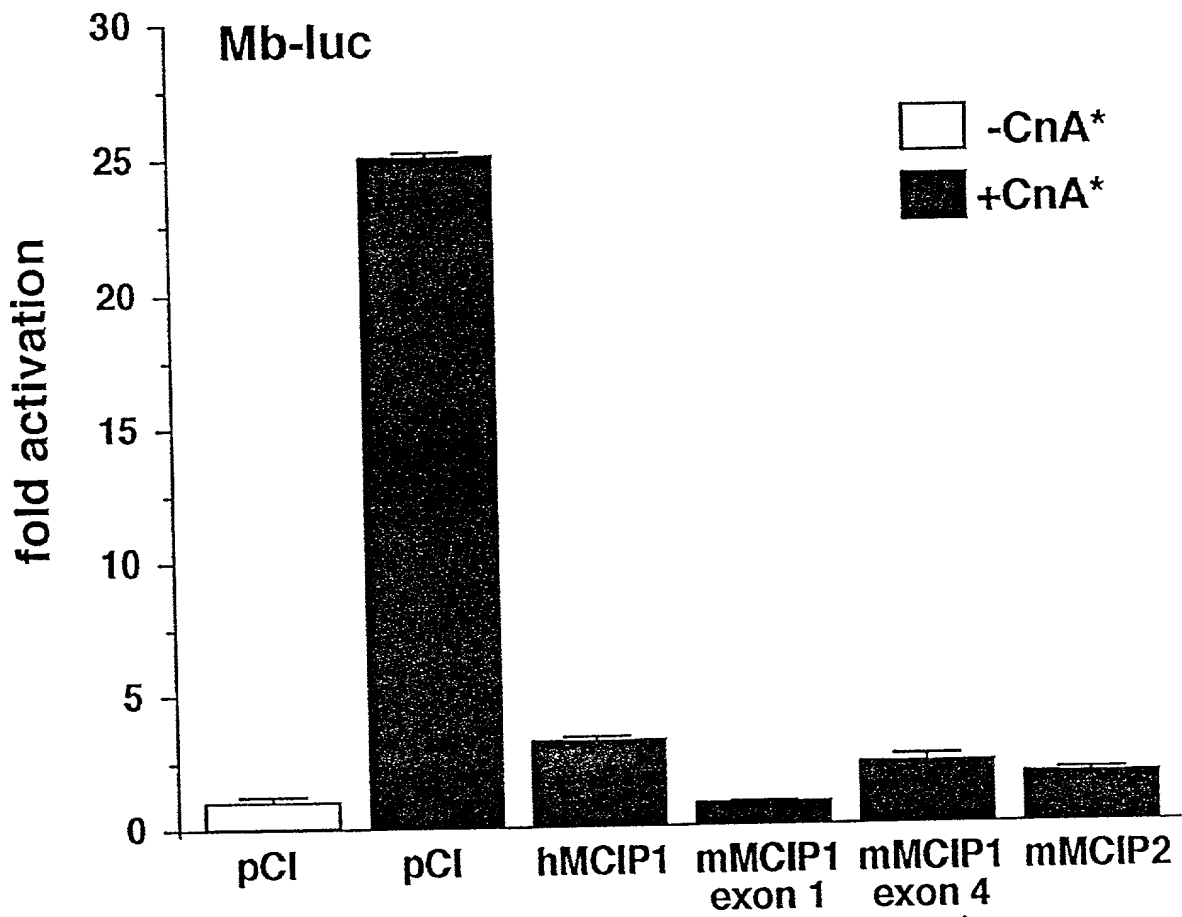
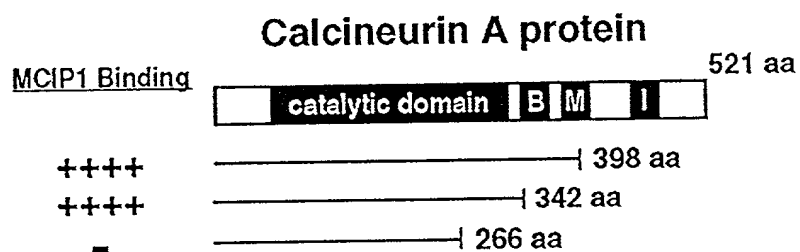


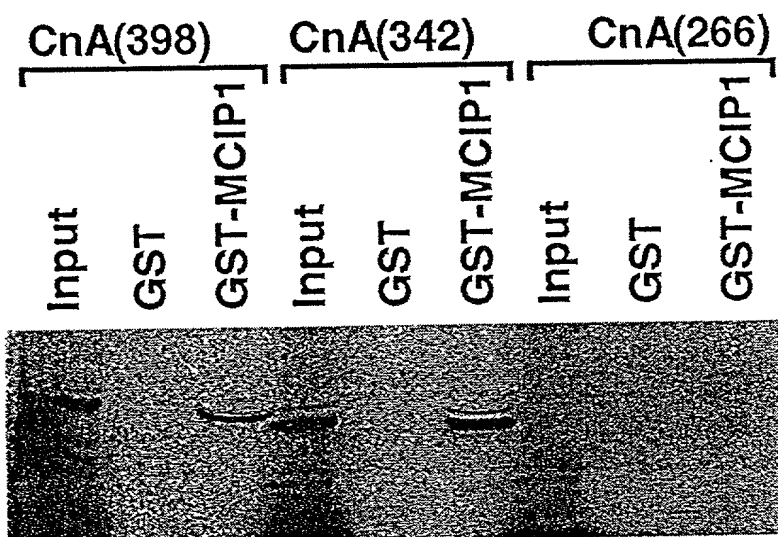
FIG. 3

# FIG. 4A

## A



## B



# FIG. 4B

FIG. 5 A

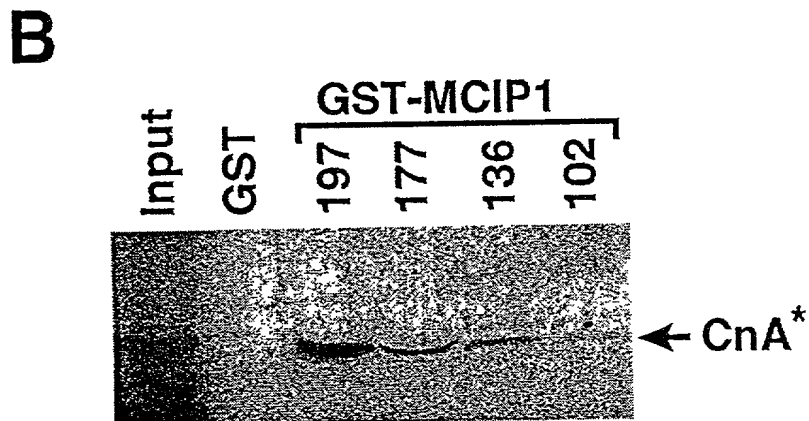
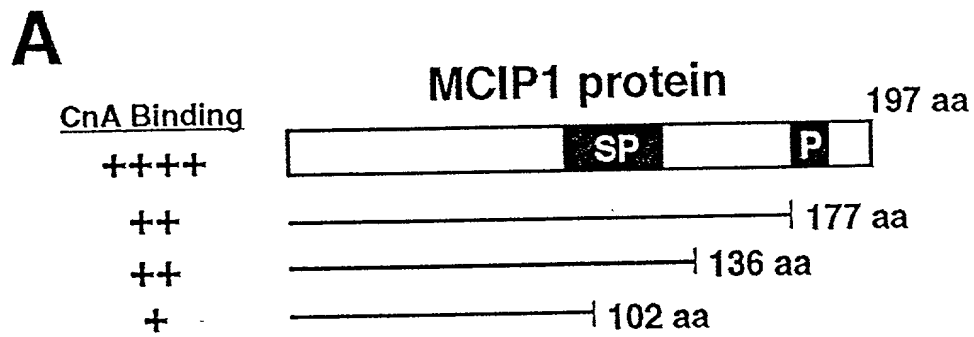


FIG. 5B

097893-09628260

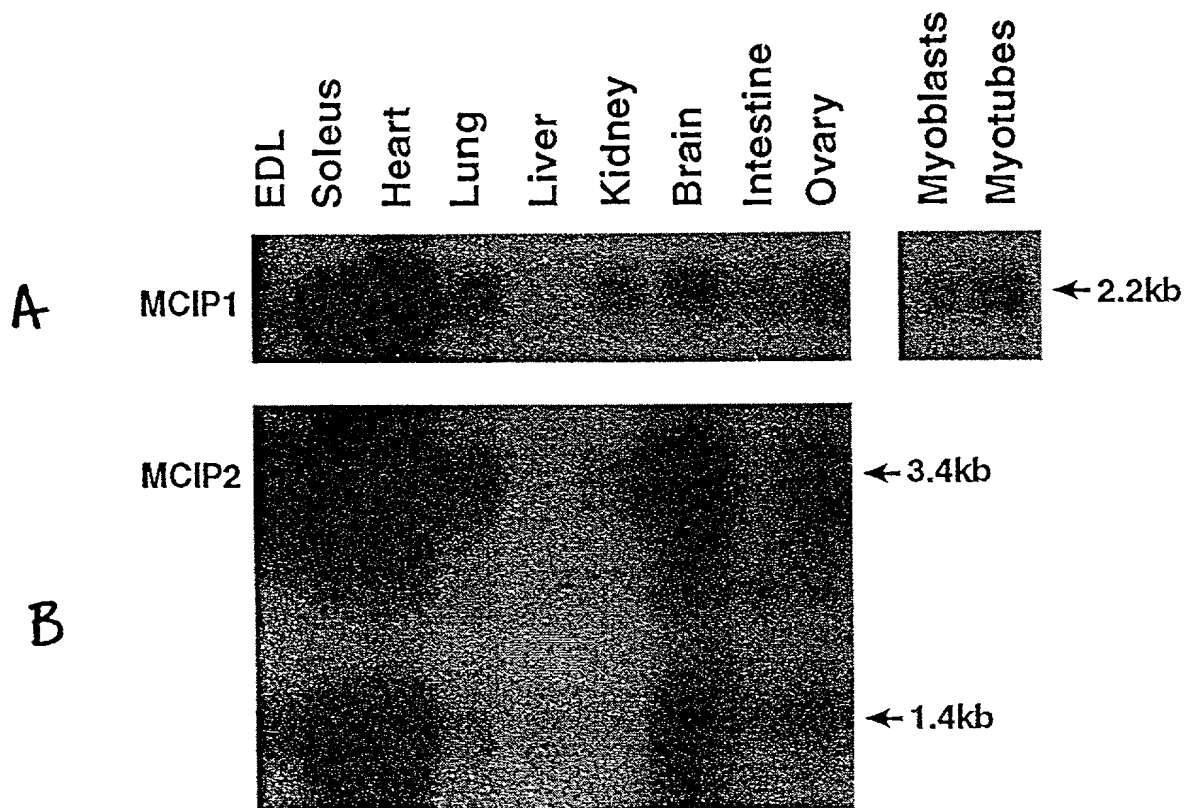


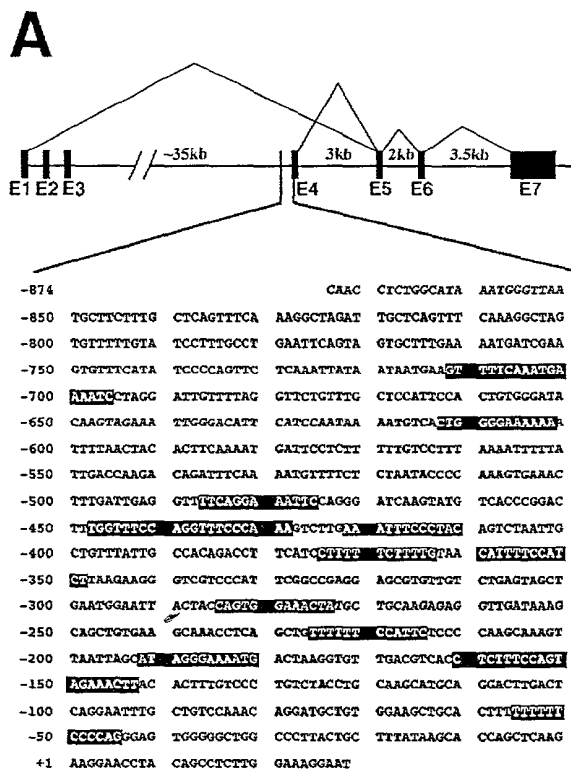
FIG. 6 A-B

A

Rank	Fold	Gene	GenBank ID
hypertrophic $\alpha$ -MHC-CnA* vs. wild-type			
1	8.1	Calcineurin-A	AA245461
2	4.0	ANF precursor type B	AA030805
3	3.3	ANF precursor type A	W14325
4	3.1	sk mus LIM protein (FHL1)	AA047966
5	3.0	OSF-2	W81878
+6	2.7	MCIP-1	AA200984
7	2.7	EST (mouse)	AA110791
8	2.3	MCPSF (Mouse cleavage and polyadenylation factor)	AA221269
failing $\alpha$ -MHC-CnA* vs. hypertrophic $\alpha$ -MHC-CnA*			
1	3.3	Procollagen XV	W83331
2	2.9	OSF-2	W81878
3	2.8	EST (mouse)	AA124355
4	2.7	Alpha-crystallin	AA231358
+5	2.5	MCIP-1	AA200984
6	2.2	Procollagen III	W89883
7	2.1	p53BP2	AA467287
8	2.1	Calcineurin-A	AA245461

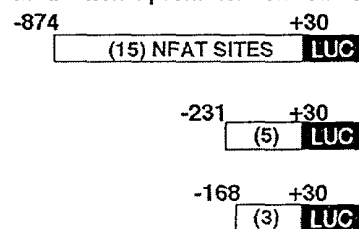
FIG. 7

FIG. 7

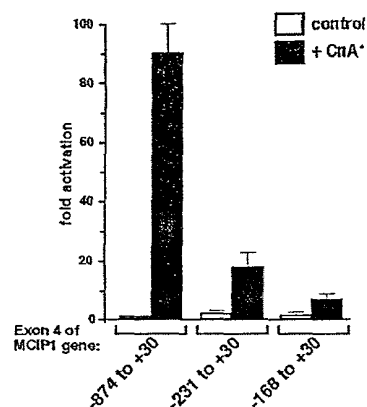


B

### MCIP exon 4 promoter constructs



C



**FIG. 8A-C**

The diagram illustrates the calcineurin signaling pathway and the structure of the MCIP1 gene. At the top,  $[Ca^{2+}]$  (calcium ions) is shown. An arrow points down to **calcineurin**. From **calcineurin**, an arrow points down to **NFAT**. From **NFAT**, an arrow points left to **other targets** and an arrow points down to the **MCIP1** gene. A diagonal line with a perpendicular bar (inhibition symbol) points from **calcineurin** to the arrow between **NFAT** and the **MCIP1** gene, indicating that calcineurin inhibits NFAT's ability to activate MCIP1. Below the pathway, the **MCIP1** gene structure is shown. It consists of exons E1, E2, E3, E4, E5, E6, and E7. Exons E1, E2, and E3 are grouped together with a bracket and labeled as the **calcineurin responsive region**. A scale bar indicates distances: ~35kb between E3 and E4, 3kb between E4 and E5, 2kb between E5 and E6, and 3.5kb between E6 and E7. The gene is flanked by -874 and +30.

FIG. 9

A

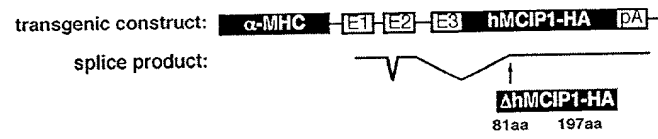


FIG. 10

09782953-024304

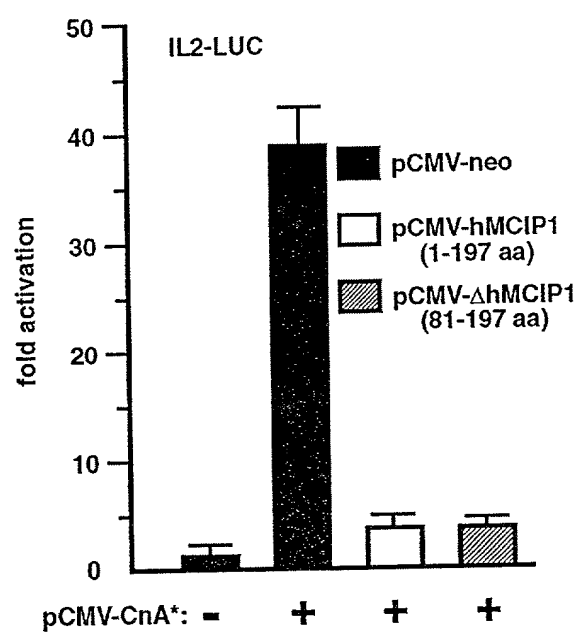


FIG. 11

A bar graph showing the percent increase in heart/body weight for two mouse genotypes: wild type (white bars) and  $\alpha$ -MHC-hMCIP1 (black bars). The y-axis represents the percent increase in heart/body weight, ranging from 0 to 35. The x-axis shows two conditions: isoproterenol and exercise. Error bars are present on all bars.

Condition	wild type	$\alpha$ -MHC-hMCIP1
isoproterenol	~23	~9.5
exercise	~29.5	~12.5

FIG. 12